

REMARKS

By this reply, claims 29 and 30 have been cancelled without prejudice to or disclaimer of the subject matter contained therein; and claims 11, 16 and 31 have been amended, leaving claims 1, 2, 5-28 and 31 pending in the application.

Applicants submit that the claim amendments do not raise any new issue, do not add new matter, do not add additional claims, and place the application in condition for allowance. Entry of the amendments is therefore respectfully requested.

Reconsideration and allowance are respectfully requested in light of the following remarks.

Restriction Requirement

Claims 11-31 have been withdrawn from consideration as being drawn to non-elected subject matter. Claim 11, which is directed to a method of producing a sprocket, has been amended to recite each of the features recited in claim 1, which is directed to a sprocket. According to M.P.E.P. § 821.04(b), once claim 1 is found to be allowable, claim 11, and claims 12-28 and 31 depending from claim 1, should be rejoined.

Obviousness-Type Double Patenting Rejections

Claims 1, 2 and 5-10 stand rejected under the doctrine of obviousness-type double patenting over claims 1-9, 15-22 and 27-32 of co-pending U.S. Application No. 10/171,193.

Applicants will reconsider the submission of a Terminal Disclaimer to obviate this rejection upon the indication of allowable subject matter in this application.

First Rejection Under 35 U.S.C. §103

Claims 1, 2 and 5-10 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,414,258 to Amano in view of U.S. Patent No. U.S. Patent No. 5,879,743 to Revankar and U.S. Patent No. 2,271,172 to Heaslet. The rejection is respectfully traversed.

Claim 1 recites a sprocket comprising “a base steel member comprising an outer toothed profile surface, at least a portion of the outer toothed profile surface having a wear and corrosion resistant coating disposed thereon; the coating comprising an iron-based alloy, the iron-based alloy comprising at least 60 weight % iron, and nickel, wherein the base steel member comprises a surface hardened zone extending inwardly from the outer toothed profile surface, and wherein the surface hardened zone is induction hardened” (emphasis added).

As acknowledged in the Office Action, Amano fails to disclose a sprocket comprising a base steel member having a wear and corrosion resistant coating as recited in claim 1 on an outer toothed profile surface of the base steel member.

The Office Action contends that Amano discloses that “the articles can be subjected to induction hardening.” Applicants note Amano discloses that the inner peripheral surface of a bushing can be induction heated while the outer peripheral surface of the bushing is cooled. See, e.g., column 10, lines 30-36 and 45-52; and column 20, lines 31-58. Amano does not, however, disclose or suggest a sprocket comprising a base steel member having an induction hardened, surface hardened zone extending inwardly from an outer toothed profile surface. Thus, Amano does not disclose or suggest that it would have been desirable to induction harden the

disclosed sprocket, much less that the disclosed sprocket would have an acceptable structure or properties if it were induction hardened.

Accordingly, because the combination of Amano, Revanker and Heaslet does not disclose or suggest each and every feature recited in claim 1, the applied references do not support a *prima facie* case of obviousness. See M.P.E.P. § 2143.03. Therefore, claim 1 is patentable.

Claims 2 and 5-10, which depend from claim 1, are also patentable for at least the same reasons as those for which claim 1 is patentable. Therefore, withdrawal of the rejection is respectfully requested.

Second Rejection Under 35 U.S.C. §103

Claims 1, 2 and 5-10 stand rejected under 35 U.S.C. § 103(a) over Revankar in view of "applicant's disclosure of the prior art" and Amano. The rejection is respectfully traversed.

As discussed above, Amano does not suggest a sprocket comprising a base steel member having an induction hardened, surface hardened zone extending inwardly from an outer toothed profile surface. Accordingly, the sprocket recited in claim 1 is patentable over the applied art for at least this reason.

Dependent claims 2 and 5-10 are also patentable for at least the same reasons as those for which claim 1 is patentable. Therefore, withdrawal of the rejection is respectfully requested.

Conclusion

For the foregoing reasons, allowance of the application is respectfully requested. Should the Examiner have any questions concerning this response, Applicants' undersigned representative can be reached at the number given below.

Respectfully submitted,

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